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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/520,212

11/04/2005

Georg Weber

588.1041

5166

23280 7590 04/23/2007
DAVIDSON, DAVIDSON & KAPPEL, LLC
485 SEVENTH AVENUE, 14TH FLOOR
NEW YORK, NY 10018

EXAMINER

LOPEZ, FRANK D

ART UNIT

PAPER NUMBER

3745

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

04/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/520,212 | WEBER ET AL. | |
| | Examiner | Art Unit | |
| | F. Daniel Lopez | 3745 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on February 16, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 15-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 15-24 is/are rejected.
- 7) ☐ Claim(s) 25-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Applicant's arguments filed February 16, 2006, have been fully considered but they are not deemed to be persuasive.

Applicant's argues that compressors such as those of Olsen and Morita et al have been known for a long time, as have saw tooth threads. Morita et al teaches that the strength of the housing can be changed by "increasing a height of the thread, a pitch of the thread, the number of threads...and combinations thereof" (page 7 line 16-18), and concludes that "Morita et al and the prior art teach away from using saw tooth threads" (page 7 line 18-19).

The examiner disagrees. Nothing in Morita et al determines what type of teeth is used. The teeth are shown schematically. Both v-shaped and saw teeth have a height, and a pitch. Therefore, nothing in Morita et al teaches away from saw teeth.

As applicant has stated, both compressors and saw teeth have been well known for a long time. The question is not, why isn't there a reference which explicitly puts saw teeth in the compressor joint. Rather the question is, is there a reason to use saw teeth as the teeth of the joint of the compressor. Schorr et al actually answers this question. It indicates that with saw teeth, that bearing depth can be greater than other threads. Since Morita et al asks for increasing a height (depth) of the thread, to increase joint strength, use of saw teeth, as taught by Schorr et al, would meet this desire of increased joint strength.

Although Schorr et al teaches this bearing depth is important for plastic housings, as argued by applicant, Morita et al clearly indicates that bearing depth is also important for other (i.e. compressor) joints. Although Schorr et al deals with a different type of fluid system, the teaching is about threaded joints, which is applicable to both Olsen and Morita et al, since they have a threaded joint. Therefore, these 103 rejections are proper.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 15-24 are rejected under 35 U.S.C. § 103 as being unpatentable over either Olsen or Morita et al in view of Schorr et al. Olsen discloses a reciprocating piston machine comprising a housing cover (17) screw connected to a housing (10) enclosing the pistons; wherein a shaft bearing (24, 25) is in the cover and the screw connection is in a ring nut (14); but does not disclose that the screw thread is a saw tooth thread.

Morita et al discloses a reciprocating piston machine comprising a housing cover (6) screw connected to a housing (1), by threads in the housing and cover; wherein the housing encompasses the pistons (2); wherein a shaft bearing (8) is in the cover and the screw connection is in a ring nut; but does not disclose that the screw thread is a saw tooth thread.

Schorr et al teaches, for a piston machine comprising a housing cover (48) screw connected to a housing (10); that the screw thread is a saw tooth thread, for the purpose of having a greater thread bearing depth (column 3 line 58-column 4 line 2).

Since Olsen and Morita et al have a housing cover screw connected to a housing, but does not disclose what type of threads are used; and Schorr et al teaches a specific purpose for saw tooth threads; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the threads of either Olsen or Morita et al saw tooth threads, as taught by Schorr et al, for the purpose of having a greater thread bearing depth.

Conclusion

Claims 25-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

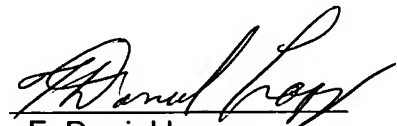
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3745

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -4:45 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read "F. Daniel Lopez", written over a horizontal line.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
April 16, 2007